ABSTRACT

A flexible ultrasonic transducer, comprising a plurality of microelectromechanical ultrasonic transducer elements. Each of the microelectromechanical ultrasonic transducer elements in turn ~~comprises~~ have a base, a membrane and a first and a second electrode. The base is made of soft material, having an upper side and a lower side, with a support set on the upper side. The membrane is able to perform vibrations, having an outer side and an inner side, which is ~~laid~~ positioned on the support. The first electrode is placed in, or on, the base and the second electrode placed in the membrane, the first and second electrodes being connected with a voltage source. Manufacturing the flexible ultrasonic transducer requires less steps without increasing cost. By having a flexible shape, emission and reception of ultrasonic waves as well as an effective area are enhanced, with less attenuation of ultrasonic waves, resulting in more effective sensing.